## **Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application.

## **Listing of Claims:**

1. (Currently Amended) Silane of the structure (Ia) below

where the radicals and indices have the following meanings:

R is an open-chain and/or cyclic alkylene, arylene, or alkylene-arylene group, with 1 to 10 carbon atoms in each case, which can be interrupted by one or more oxygen or sulfur atoms or carboxyl or amino groups or can carry such atoms/groups at their end opposite the silicon atom,

R<sup>1</sup> is a Z'-substituted, open-chain and/or cyclic alkylene, arylene, or alkylene-arylene group, with 1 to 10 carbon atoms in each case, which can be interrupted by one or more oxygen or sulfur atoms or carboxyl or amino groups or can carry such atoms/groups at their end opposite the silicon atom,

R is an open-chain and/or cyclic alkyl, alkenyl, aryl, or alkylaryl, or arylalkyl group, with preferably 1 to 20 carbon atoms,

B and B' can be the same or different, both radicals can be a straight-chain or branched organically polymerizable group with at least one C=C double bond and at least 2 carbon atoms, instead of this B' can also be  $-\mathbf{R}^2_{a}\mathbf{SiX}_{4-a}$   $-\mathbf{R}^2\mathbf{SiX}_3$  or  $-\mathbf{R}^2_{a}\mathbf{R}^1_{b}\mathbf{SiX}_{4-a-b}$ 

 $-\mathbf{R}^2\mathbf{R}'_{\mathbf{b}}\mathbf{SiX}_{3-\mathbf{b}}$ , where  $\mathbf{R}^2$  is an alkylene group with 1 to 10 carbon atoms and  $\mathbf{R}'$  is defined as above,

X is a group which can enter into a hydrolytic condensation reaction with the formation of Si-O-Si bridges,

Z' is selected from -NH-C(O)O-, -NH-C(O)-, or -CO(O)-, where the two radicals named first are bonded via the NH group to the group B' while the carboxylate group can point in both directions, where,

when Z' is a -CO(O)- group, the carbon atom of which is bonded to the radical B', and B' is a straight chained or branched organically polymerizable group having at least one C=C double bond and at least 2 carbon atoms, this C=C double bond must be part of a (meth)-acrylate residue as component of B', and

the grouping B'-Z'- is not an acrylate group if B comprises an acrylate group, and the grouping B'-Z'- is not a methacrylate group if B comprises a methacrylate group,

b is 0 or 1.

a is 1 or 2, and

2. (Previously presented) Silane according to claim 1, in which

R<sup>1</sup> is a group with 1 to 10 carbon atoms and/or

B and optionally also B' carries at least one Michael system, and/or

X is a  $C_1$ - $C_{10}$  alkoxy group.

3. (Previously presented) Silane according to claim 1, in which

the radicals B and optionally also B' are acrylic acid ester groups and/or methacrylic acid ester groups of trimethylolpropane, of glycerin, of pentaerythritol, of C<sub>2</sub>-C<sub>4</sub>-alkane diols, of polyethylene glycols, of polypropylene glycols, or in given cases substituted and/or alkoxylated, bisphenol A or comprise these esters.

4. (Previously presented) Silane according to claim 1, in which

the radicals B and optionally also B' comprise an end-to-end carbon skeleton or this skeleton is interrupted by heteroatoms or groups chosen from among O, S, SO, NH, NHCO, PR, POR, CONHCO, COO, NHCOO.

- 5. (Previously presented) Silane according to claim 1, in which a is equal to 1 and b is equal to 0.
- 6. (Previously presented) Silane according to claim 1, in which a is equal to 1 and b is equal to 1.
- 7. (Previously presented) Silane according to claim 1, in which B is a (meth)acrylate group or comprises a radical which is bonded via a (meth)acrylate group to R<sup>1</sup> and comprises no additional or one, two, or three (meth)acrylate groups.
- 8. (Previously presented) Silane according to claim 1, in which B is bonded via a group Z to R<sup>1</sup>, where Z is an -O-C(O)-, -S-C(O), or -NH-C(O)- group if Z' is -NH-CO- and Z is -O-R<sup>4</sup>, -S-R<sup>4</sup>, -NH-R<sup>4</sup>, -C(O)O-R<sup>4</sup>, -O-, -S-, -NH-, or -C(O)O- if Z' is -NH-C(O)O-, where R<sup>4</sup> is selected from alkylene, arylene, or alkylarylene with 1 to 10 (for ringless groups) or 6 to 14 (for ring-containing groups) carbon atoms.
- (Previously presented) Silane according to claim 7, in which Z' is-NH-C(O)O- or
   NH-C(O).

- 10. (Previously presented) Silane according to claim 7, in which b is zero.
- 11. (Previously presented) Silane according to claim 7, in which b is 1 and R' is a  $C_1$ - $C_4$  alkyl group.
- 12. (Previously presented) Silane according to claim 1, in which B' is a (meth)acrylate group or comprises a radical which is bonded via a (meth)acrylate group to R<sup>1</sup> and comprises no additional or one, two, or three (meth)acrylate groups.
- 13. (Previously presented) Silane according to claim 1, in which B' is a dialkoxyalkylsilylalkylene group with 1 to 4 carbon atoms in the alkyl and alkoxy groups and 1 to 8 carbon atoms in the alkylene group.
- 14. (Previously presented) Silane according to claim 1, in which B comprises at least one additional group

or B' comprises at least one additional group

where the radicals and indices have the meanings specified in claim 1 for the structure (1a).

## 15. – 36. (Cancelled)

- 37. (Currently amended) Process for the production of a silane with the structure (Ia) as defined in claim 1, comprising the following steps
  - (a) preparation of a compound with the structure (II) or an isomer

a re-esterification product, or one of this compound's condensation products arising by loss of an alcohol molecule

$$\{B-R^1-R-\}_{a}(R')_{b}SiX_{4-a-b}$$
 (II)

in which B, R<sup>1</sup>, R, R', X, a, and b have the meanings specified in claim 1 for the structure (Ia) and Y is OH or COOH,

## and Y means COOH,

(b) reaction of this compound or of the isomer, re-esterification product,

or condensation product with a compound

B'NCO,

in which B' has the meaning specified in claim 1 for structure (Ia), and

- (c) in given cases, workup of the product.
- 38. (Previously presented) Process for the production of a silane with the formula (Ia) as defined in claim 1, including the following steps:
  - (a) preparation of a compound with the structure (II) or an isomer

a re-esterification product, or one of this compound's condensation products arising by loss of an alcohol molecule

$$\{B-R^1-R-\}_a(R')_bSIX_{4-a-b}$$
 (II)

in which B, R<sup>1</sup>, R, R', X, a, and b have the meanings specified in claim 1 for the structure (Ia),

and Y means COOH.

(b) reaction of this compound or of the isomer, re-esterification product,

or condensation product with a compound

B'OH,

in which B' has the meaning specified in claim 1 for structure (Ia), and

- (c) in given cases, workup of the product.
- 39. (Currently amended) Process for the production of a silane with the formula (Ia)

$$\{B-R^1-R-\}_a(R')_bSi(X)_{4-a-b}$$
 (Ia)

 $Z'$ 
 $I$ 
 $B'$ .

where the radicals and indices have the following meanings:

R is an open-chain and/or cyclic alkylene, arylene, or alkylene-arylene group, with 1 to 10 carbon atoms in each case, which can be interrupted by one or more oxygen or sulfur

atoms or carboxyl or amino groups or can carry such atoms/groups at their end opposite the silicon atom,

R<sup>1</sup> is a Z'-substituted, open-chain and/or cyclic alkylene, arylene, or alkylene-arylene group, with 1 to 10 carbon atoms in each case, which can be interrupted by one or more oxygen or sulfur atoms or carboxyl or amino groups or can carry such atoms/groups at their end opposite the silicon atom,

R is an open-chain and/or cyclic alkyl, alkenyl, aryl, or alkylaryl, or arylalkyl group, with preferably 1 to 20 carbon atoms,

B and B' can be the same or different, both radicals can be a straight-chain or branched organically polymerizable group with at least one C=C double bond and at least 2 carbon atoms, instead of this B' can also mean be  $-\mathbf{R}^2_{a}\mathbf{SiX}_{4-a} - \mathbf{R}^2\mathbf{SiX}_{3}$  or  $-\mathbf{R}^2_{a}\mathbf{R}^1_{b}\mathbf{SiX}_{4-a-b}$   $-\mathbf{R}^2\mathbf{R'}_{b}\mathbf{SiX}_{3-b}$ , where  $\mathbf{R}^2$  is an alkylene group with 1 to 10 carbon atoms and R' is defined as above.

X is a group which can enter into a hydrolytic condensation reaction with the formation of Si-O-Si bridges.

Z' is -CO(O)-, where the carbon atom is bound to the residue B',

a is 1 or 2,

and b is 0 or 1

comprising the following steps:

(a) preparation of a compound with the structure (II) or an isomer

a re-esterification product, or one of this compound's condensation products arising by loss of an alcohol molecule

$$\{B-R^1-R-\}_a(R')_bSiX_{4-a-b}$$
 (II)

in which B, R<sup>1</sup>, R, R', X, a, and b have the meanings specified in claim 1 for the structure (Ia) and Y is OH,

(b) reaction of this compound or of the isomer, re-esterification product,

or condensation product with a compound

$$B'C(O)X'$$
,

in which B' has the meaning specified in claim 1 for structure (Ia) and C(O)X' is a carboxylic acid group or an activated carbonyl compound, in particular an acid chloride or an acid anhydride,

and

- (c) in given cases, workup of the product.
- 40. (Previously presented) Silane according to claim 1, in which Z' is-NH-C(O)O- or –NH-C(O).
- 41. (Previously presented) Silane according to claim 9, in which b is zero.
- 42. (Previously presented) Silane according to claim 9, in which b is 1 and R' is a C<sub>1</sub>-C<sub>4</sub> alkyl group.
- 43. (Previously presented) Silane according to claim 40, in which b is 1 and R' is a C<sub>1</sub>-C<sub>4</sub> alkyl group.

44. (Previously presented) Silane according to claim 2, in which R<sup>1</sup> is a group with 1 to 4 carbon atoms.